

CLAIMS

1. A personal security and tracking system comprising:

a portable signaling unit including a GPS receiver for determining a location of
5 the portable signaling unit, and a cellular telephone antenna adapted to transmit a cellular
digital packet data (CDPD) signal;

a central dispatch station located remote from the portable signaling unit and
adapted to transmit a control signal; and

a cellular telephone system adapted to receive the CDPD signal from the portable
10 signal unit and re-transmit the CDPD signal to the central dispatch station, and to receive
the control signal from the central dispatch station and re-transmit the control signal to
the portable signaling unit, thereby providing two-way digital communication between
the portable signaling unit and the central dispatch station;

wherein the CDPD signal includes GPS data corresponding to the location of the
15 portable signaling unit.

2. A method of locating a portable signaling unit comprising:

receiving, with a GPS receiver coupled to the portable signaling unit, a GPS
signal including position information for the portable signaling unit;

20 transmitting a cellular digital packet data (CDPD) signal that includes the position
information from the portable signaling unit;

receiving the CDPD signal with a cellular telephone system;

re-transmitting the CDPD signal from the cellular telephone system;

receiving the CDPD signal at a central dispatch station; and

25 determining, with a computer at the central dispatch station, a location of the
portable signaling unit based at least in part on the position information received in the
CDPD signal.